

# CCA2014 Program

<b>Sunday, November 30th</b>	
15:00 - 17:00	Registration
17:00 - 18:00	Reception
<b>Monday, December 1st</b>	
	<b>Session Chairs</b>
08:00 - 09:00	Registration
09:00 - 09:10	Welcome Address
	Plenary Talk-I
	X. Obradors
09:10 - 09:35	<b>[Plenary] Coated Conductor Development and Applications in the United States of America</b> <i>S. Pamidi (Florida State Univ.)</i>
09:35 - 10:00	<b>[Plenary] Recent progress in REBCO coated conductors via RCE-DR</b> <i>S.I. Yoo (Seoul National Univ.)</i>
10:00 - 10:20	Coffee Break
	Oral Session A (Coated Conductor Applications I)
	H. Weijers & Jeonwook Cho
10:20 - 10:40	<b>[Invited] Electromagnetic field analyses of coils and assembled conductors consisting of coated conductors</b> <i>N. Amemiya (Kyoto Univ.)</i>
10:40 - 11:00	<b>[Invited] Status and application perspectives of superconducting fault current limiters in Korea</b> <i>Hye-Rim Kim (KEPR)</i>
11:00 - 11:20	<b>[Invited] Innovative Superconducting DC Cable Using the Longitudinal Magnetic Field Effect</b> <i>T. Matsushita (Kyushu Institute of Technology)</i>
11:20 - 11:40	<b>[Invited] Application potential of round wires/cables made from CC tapes</b> <i>M. Wojenciak (Institute of Electrical Engineering SAS)</i>
11:40 - 12:00	<b>[Invited] Development and Demonstration Situation of HTS Cable system in Korea</b> <i>Cheol-Hwi Ryu (LS Cable &amp; System)</i>
12:00 - 13:00	Lunch
	Oral Session B (Coated Conductor Applications II)
	T. Kiss & Hye-Rim Kim
13:00 - 13:20	<b>[Invited] Development of a 66/6.9kV-20MVA REBCO Superconducting Transformer with a Current Limiting Function</b> <i>M. Iwakuma (Kyushu Univ.)</i>
13:20 - 13:40	<b>[Invited] High Field HTS SMES Coil</b> <i>R. Gupta (Brookhaven National Laboratories)</i>
13:40 - 14:00	<b>[Invited] Superconducting magnet system of an in-flight fragment separator for a heavy ion accelerator planned in Korea</b> <i>J.W. Kim (Institute for Basic Science)</i>
14:00 - 14:20	<b>[Invited] Design and analysis of a 12 MW superconducting wind power generator</b> <i>M.W. Park (Changwon National Univ.)</i>
14:20 - 14:30	Break
	Oral Session C (Coated Conductor Applications III)
	D. Larbalestier & R. Gupta
14:30 - 14:45	<b>Expediting the transfer of 2G HTS tapes from production to applications: customised finish and integration into HTS device modules</b> <i>A. Molodtsov (Super Ox)</i>
14:45 - 15:00	<b>Heat transfer monitoring between HTS-CCs and LN2</b> <i>B. Dutoit (École Polytechnique Fédérale de Lausanne)</i>
15:00 - 15:15	<b>Optimal design of coils made of coated conductors</b> <i>V.M. Rodriguez Zermeno (Karlsruhe Institute of Technology)</i>
15:15 - 15:30	<b>AC Loss and Screening Current Induced Magnetic Field Analysis for Double Pancake HTS Coil using Homogenization FEM Model</b> <i>Seokho Kim (Changwon National University)</i>
15:30 - 15:50	<b>[Invited] Current R &amp; D Status of DC 80kV Superconducting Power Cable at KEPCO.</b> <i>S. Hwang (Korea Electric Power Corporation)</i>
15:50 - 16:00	Coffee Break
	Oral Session D (Standardization of Coated Conductors/VAMAS)
	Hyung-Seop Shin & G. Nishijima
16:00 - 16:20	<b>[Invited] Towards standardization of Ic measurements for REBCO conductor</b> <i>G. Nishijima (VAMAS-TWA16/National Institute for Material Science)</i>
16:20 - 16:40	<b>[Invited] REBCO Coated Conductor for the NHMFL 32 T superconducting magnet</b> <i>H. Weijers (Florida State Univ.)</i>
16:40 - 17:00	<b>[Invited] Mechanical and electromechanical properties of IBAD-MOCVD-based REBCO coated conductors</b> <i>Y. Zhang (SuperPower Inc.)</i>
17:00 - 17:20	<b>[Invited] Mechanical and Superconducting Properties of Practical REBCO Wires</b> <i>K. Osamura (Research Institute for Applied Sciences)</i>
17:20 - 17:40	<b>[Invited] Influence of anvil size on delamination strength of REBCO CC tapes by anvil test method under transverse loading</b> <i>H.S. Shin (Andong National Univ.)</i>
17:40 - 18:00	<b>[Invited] Superconducting properties of Roebel Coated Conductor Cable from Superpower and SuperOx tapes with different transposition length</b> <i>A. Kario (Karlsruhe Institute of Technology)</i>
18:00 - 18:30	Break
18:30 - 21:00	Banquet
<b>Tuesday, December 2nd</b>	
	Plenary Talk-II
	William Jo
08:00 - 08:25	<b>[Plenary] Overview of R&amp;D Status for Coated Conductors</b> <i>T. Izumi (ISTEC)</i>
08:25 - 08:50	<b>[Plenary] Opportunities of solution grown YBCO coated conductors. Let's push them further</b> <i>T. Puig (Institute de Ciència de Materials de Barcelona)</i>
08:50 - 09:00	Break
	Oral Session E (Processing & Characterization of Coated Conductors I)
	T. Doi & F. Grill
09:00 - 09:15	<b>Superconducting properties of irradiated GdBCO coated conductor tapes</b> <i>D. Fischer (Vienna University of Technology)</i>
09:15 - 09:30	<b>Investigation of In-field Spatial Homogeneity of Local Critical Current in Coated Conductor Based on Reel-to-reel Characterization Methods</b> <i>K. Higashikawa (Kyushu Univ.)</i>
09:30 - 09:45	<b>Critical current density of multilayered SmBa2Cu3Oy films in the force-free state by controlling the thickness of BaHfO3 layer</b> <i>K. Sugihara (Nagoya Univ.)</i>
09:45 - 10:00	<b>Oxide Buffer Layers for YBa2Cu3O7-δ Coated Conductors Using Cost-effective Electrodeposition Technique</b> <i>L. Sang (Shanghai University)</i>
10:00 - 10:15	<b>Current Limiting Mechanism in Long-Length RE123 Coated Conductor</b> <i>M. Inoue (Kyushu Univ.)</i>
10:15 - 10:25	Coffee Break
	Oral Session F (Processing & Characterization of Coated Conductors II)
	M. Eisterer & Hunju Lee
10:25 - 10:45	<b>[Invited] Stress and strain characterizations of REBCO coated conductors for a 25 T cryogen-free superconducting magnet</b> <i>H. Oguro (Tohoku Univ.)</i>
10:45 - 11:05	<b>[Invited] Tuning of pinning strength and its anisotropy by using segmented BaSnO3 nanorods in YBa2Cu3O7-x films</b> <i>K. Matsumoto (Kyushu Institute of Technology)</i>
11:05 - 11:25	<b>[Invited] Improvement of in-field characteristics of REBCO coated conductors</b> <i>M. Yoshizumi (ISTEC)</i>
11:25 - 11:45	<b>[Invited] Effect of artificial pinning centers' dimensionality on in-field performance of YBa2Cu3Ox thin films</b> <i>P. Mele (Hiroshima University)</i>
11:45 - 12:05	<b>[Invited] Jc enhancement in 2G coated conductors by ion irradiation</b> <i>Q. Li (Brookhaven National Laboratory)</i>

12:05 - 13:30	Lunch	
13:30 - 14:30	Poster Session	Young-Sik Jo & Ho Min Kim
	Oral Session G (Long-Length & Industrial Innovation of Coated Conductors)	T. Matsumoto & Won Nam Kang
14:30 - 14:50	[invited] Startup of coated conductor pilot production at THEVA <i>W. Prusseit (THEVA Dünnschichttechnik GmbH)</i>	
14:50 - 15:10	[invited] HTS superconductor wire: \$5/kAm by 2030? <i>V. Matias (Beam Materials, Inc.)</i>	
15:10 - 15:30	[invited] Recent Progress of 2G superconducting wire in SuNAM <i>S.H. Moon (SuNAM Co.)</i>	
15:30 - 15:50	[invited] Progress in coated conductor development for high magnetic field applications <i>V. Selvamanickam (Huston Univ.)</i>	
15:50 - 16:10	[invited] Processing of high-field long-length coated conductors via pulsed laser deposition onto bi-axially textured buffer layers <i>A. Usoskin (Bruker HTS GmbH)</i>	
16:10 - 16:30	[invited] Coated Conductors – properties and challenges from the view of industrial use <i>T. Arndt (Siemens AG)</i>	
16:30 - 16:50	[invited] Fabrication of long REBCO coated conductors by pulsed laser deposition process <i>Y. Li (Shanghai Jiao Tong University)</i>	
16:50 - 17:10	[invited] Status of 2G HTS tape production at SuperOx <i>S. Samoilenkov (Super Ox)</i>	
17:10 - 17:20	Coffee Break	
	Oral Session H (Processing & Characterization of Coated Conductors III)	V. Selvamanickam & Haigun Lee
17:20 - 17:35	Critical current anisotropy of GdBCO tapes grown on ISD-MgO substrate <i>M. Lao (Vienna University of Technology)</i>	
17:35 - 17:50	Flux pinning properties on SmBCO superconducting films with high number density of BaHfO <sub>3</sub> nano-rods at lower measurement temperatures <i>S. Miura (Nagoya University)</i>	
17:50 - 18:05	Study on nucleation and growth of YBCO Films deposited by MOD method with in situ resistance measurement <i>W. Yang (Shanghai University)</i>	
18:05 - 18:20	Epitaxial growth of thick YBCO films by MOD method at low pressure atmosphere <i>Z. Liu (Shanghai University)</i>	
18:20 - 19:00	Break (Table Setting)	
19:00 - 21:00	Rump Session	V. Matias & Minwon Park
Wednesday, December 3rd		
	Oral Session I (Coated Conductors Using Non-cuprate Materials)	Q. Li & Kookchae Chung
08:00 - 08:20	[invited] Improving critical currents and irreversibility line in Fe- and Cu-based High T <sub>c</sub> Superconductors <i>B. Maier (Los Alamos National Laboratory)</i>	
08:20 - 08:40	[invited] Thin film growth of BaFe <sub>2</sub> (As, P) <sub>2</sub> and NdFeAs(O, F) on single-crystal and IBAD-MgO buffered substrates <i>Hiroshi Ikuta (Nagoya University)</i>	
08:40 - 08:55	Observation of Unstable Flux Penetration in HPCVD Deposited MgB <sub>2</sub> Films and Coated-Conductors <i>M. Ranot (Sungkyunkwan University)</i>	
08:55 - 09:15	[invited] Application aspects of Fe-based superconductors – Prospects for Coated Conductors <i>B. Holzapfel (Institute for Technical Physics, Karlsruhe Institute of Technology)</i>	
09:15 - 09:25	Break	
	Oral Session J (Processing & Characterization of Coated Conductors IV)	S. Samoilenkov & T. Arndt
09:25 - 09:45	[invited] Flux pinning properties of SmBa <sub>2</sub> Cu <sub>3</sub> O <sub>y</sub> films with BaHfO <sub>3</sub> nanorods <i>Y. Yoshida (Nagoya Univ.)</i>	
09:45 - 10:05	[invited] Magnetic characterization of coated conductors <i>M. Eisterer (Vienna University of Technology)</i>	
10:05 - 10:25	[invited] Thickness Issues for Oxide Buffer and Superconducting Layers in REBaCuO Coated Conductors <i>C. Cai (Shanghai University and Shanghai Creative Superconductor Technology Co. Ltd)</i>	
10:25 - 10:45	[invited] Advances in nanocomposite YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> superconductor thin films and coated conductors derived from chemical solutions <i>X. Obradors (Inst. de Ciència de Materials de Barcelona)</i>	
10:45 - 10:55	Coffee Break	
	Oral Session K (Processing & Characterization of Coated Conductors V)	P. Mele & Dong Woo Ha
10:55 - 11:15	[invited] Spatial variation of local critical current density in long length RE-123 coated conductor <i>T. Kiss (Kyushu Univ.)</i>	
11:15 - 11:35	[invited] Growth and superconducting properties of YBCO films on conductive Nb-doped SrTiO <sub>3</sub> and Ni buffered {100}<001> Cu tapes <i>T. Doi (Kyoto Univ.)</i>	
11:35 - 11:55	[invited] Exploration of variations in the properties of coated conductors of nominally identical manufacture <i>D. Larbalestier (National High Magnetic Field Laboratory)</i>	
11:55 - 12:15	[invited] Numerical models of HTS coated conductors are now ready for realistic applications <i>F. Grilli (Karlsruhe Institute of Technology)</i>	
12:15 - 12:35	[invited] Resistance-Free Joint for GdBCO-Coated Conductors <i>(Korea Univ.)</i>	Haigun Lee
12:35 - 12:50	Session Summary	
12:50 - 13:00	Closing Address	
13:00 - 17:00	Lunch & Technical tour	